

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the above-identified application.

Listing of Claims

1. (Currently Amended) A method comprising:
forming a tungsten plug in a dielectric layer;
forming an electrically conductive interconnect line on the dielectric layer after the
formation of the tungsten plug in the dielectric layer, wherein the tungsten plug is
electrically connected to the electrically conductive interconnect line;
removing photoresist material to expose a surface of the electrically conductive
interconnect line;
exposing the exposed surface of the electrically conductive interconnect line with ionized
air after the formation of the electrically conductive interconnect line.
2. (Original) The method of claim 1 further comprising contacting the electrically
conductive interconnect line with a solution to remove residual polymer after the electrically
conductive interconnect line is exposed to ionized air.
3. (Original) The method of claim 2, wherein the liquid is one that is able to remove a
photoresist material from the electrically conductive line.
4. (Original) The method of claim 1, further comprising exposing the electrically conductive
interconnect line with ionized air during a transfer of a wafer in a wafer transfer system, wherein
the electrically conductive interconnect line is included on the wafer.
5. (Original) The method of claim 1, wherein exposing the electrically conductive
interconnect line to ionized air comprises exposing the electrically conductive interconnect line
with at least one of positive ions and negative ions.

6. (Original) The method of claim 5, wherein exposing the electrically conductive interconnect line with ionized air comprises exposing the electrically conductive interconnect line with at least one of oxygen ions, nitrogen ions, carbon dioxide ions, and argon ions.
7. (Original) The method of claim 1, wherein exposing the electrically conductive interconnect line with ionized air comprises creating positive and/or negative ions in air around the electrically conductive interconnect line.
8. (Original) The method of claim 7, wherein exposing the electrically conductive interconnect line with ionized air comprises creating positive and/or negative ions in air from a point approximately 1 meter from the electrically conductive interconnect line.
9. (Original) The method of claim 1, further comprising exposing the electrically conductive interconnect line with ionized air after the formation of the electrically conductive interconnect line for approximately 60 seconds or less.
10. (Original) The method of claim 1 wherein the electrically conductive interconnect line is included on the wafer, and wherein the wafer is moving relative to a source of the ionized air as the electrically conductive interconnect line is exposed with ionized air.
11. (Original) The method of claim 1 wherein the electrically conductive interconnect line is included on the wafer, and wherein the wafer is stationary relative to a source of the ionized air as the electrically conductive interconnect line is exposed with ionized air.
12. (Original) The method of claim 1 wherein the electrically conductive interconnect line is included on a wafer surface, and wherein the wafer surface faces a source of the ionized air.
13. (Original) The method of claim 1 wherein the electrically conductive interconnect line is included on a wafer surface, and wherein the wafer surface is parallel to a stream of the ionized air.

14. (Currently Amended) An integrated circuit produced by a method comprising:
forming a tungsten plug in a dielectric layer;
forming an electrically conductive interconnect line on the dielectric layer after the
formation of the tungsten plug in the dielectric layer, wherein the tungsten plug is
electrically connected to the electrically conductive interconnect line;
removing photoresist material to expose a surface of the electrically conductive
interconnect line;
exposing the exposed surface of the electrically conductive interconnect line with ionized
air after the formation of the electrically conductive interconnect line.
15. (Original) The integrated circuit of claim 14, wherein the method further comprises
contacting the electrically conductive interconnect line with a solution to remove residual
polymer after exposing the electrically conductive interconnect line with ionized air.
16. (Original) The integrated circuit of claim 15, wherein the liquid is one that is able to
remove a photoresist material from the electrically conductive line.
17. (Original) The integrated circuit of claim 14, wherein the method further comprises
exposing the electrically conductive interconnect line with ionized air during a transfer of a
wafer in a wafer transfer system, wherein the electrically conductive interconnect line is included
on the wafer.
18. (Original) The integrated circuit of claim 14, wherein the method further comprises
exposing the electrically conductive interconnect line with at least one of positive ions and
negative ions.
19. (Original) The integrated circuit of claim 18, wherein the method further comprises
exposing the electrically conductive interconnect line with at least one of oxygen ions, nitrogen
ions, carbon dioxide ions, and argon ions.

20. (Original) The integrated circuit of claim 14, wherein exposing the electrically conductive interconnect line with ionized air comprises creating positive and/or negative ions in air around the electrically conductive interconnect line.

21. (Original) The integrated circuit of claim 20, wherein the method further comprises exposing the electrically conductive interconnect line with ionized air comprises creating positive and/or negative ions in air from a point approximately 1 meter from the electrically conductive interconnect line.

22. (Original) The integrated circuit of claim 14, wherein the method further comprises exposing the electrically conductive interconnect line with ionized air after the formation of the electrically conductive interconnect line for approximately 60 seconds or less.

23. (Original) The integrated circuit of claim 14 wherein the electrically conductive interconnect line is included on the wafer, and wherein the wafer is moving relative to a source of the ionized air as the electrically conductive interconnect line is exposed with ionized air.

24. (Original) The integrated circuit of claim 14 wherein the electrically conductive interconnect line is included on the wafer, and wherein the wafer is stationary relative to a source of the ionized air as the electrically conductive interconnect line is exposed with ionized air.

25. (Original) The integrated circuit of claim 14 wherein the electrically conductive interconnect line is included on a wafer surface, and wherein the wafer surface faces a source of the ionized air.

26. (Original) The integrated circuit of claim 14 wherein the electrically conductive interconnect line is included on a wafer surface, and wherein the wafer surface is parallel to a stream of the ionized air.

27. (Cancelled)